

New Philosophy for New Media

Mark B. N. Hansen

The MIT Press

Cambridge, Massachusetts

London, England

eds., *Naturalizing Phenomenology: Issues in Contemporary Phenomenology and Cognitive Science*, Stanford, Calif.: Stanford University Press, 1999, pp. 272–273 (italics in original).

18. Ibid., pp. 276–277.

19. Ibid., pp. 295–298.

20. Ibid., p. 301.

Introduction

It should come as no surprise that Walter Benjamin's "Work of Art" essay casts a long shadow over contemporary discussions of new media art. In this famous and widely influential essay, Benjamin detailed a shift in the function and ontology of art in the age of technical reproducibility. Once it had become reproducible through mechanical procedures such as photography, he claimed, art underwent a fundamental metamorphosis, losing its status as a unique object tied to a single time and place (its "aura"), but gaining in return a newfound flexibility, a capacity to reach a larger, indeed mass audience, and to effect a hitherto unimagined political impact. All of this, of course, is so commonplace today as to be the material of cultural *cliché*.

Nonetheless, no one would deny the continued impact of Benjamin's essay on our efforts to think through the function of media in culture and art. One explanation for this continued impact would seem to be the very resonance of the problematic of the medium, which, although central to the now contested history of modernism in all the arts, is given a specifically technological inflection by Benjamin—an inflection particularly resonant in today's cultural climate. We are, in a sense, over the aura, but we are not through with the medium; or, at any rate, we would like to think that we're not. Indeed, Benjamin's reflections on the medium have never been more urgent than now, in the context of claims that, with digitization, media have become thoroughly and bidirectionally interchangeable (Jay David Bolter and Richard Grusin's notion of "remediation") or, even more radically, that media have simply become obsolete (Friedrich Kittler's "digital convergence"). Against the background of these neo-McLuhanesque positions, Benjamin's complex investment in the concept of medium—concretely embodied in his engagement with film—stands as a beacon of hope that media can continue to matter in the digital age.

In her recent essay, "Reinventing the Medium," art historian Rosalind Krauss gives particularly cogent form to this hope. According to Krauss, Benjamin inaugurated the generalization of the medium that inspired the major wave of conceptual art by the likes of Dan Graham, Robert Smithson, and Ed Ruscha; taking off from Benjamin, these artists deployed photography not as a specific medium, but precisely as a hybrid form, one whose dependence on the caption compromised any claims it might make to aesthetic autonomy. Krauss accordingly traces Benjamin's salience for the artists of the late 1960s and '70s to the shift that distinguishes the "Work of Art" (1935) essay from his earlier meditation on photography (1929): whereas the latter focused on the decay of the aura as a tendency within photography's own internal history, the former views the photographic as a shorthand for reproducibility *per se*, and thus as the very source for the demise of the aura across all the arts. Via this shift, Benjamin theorized the passage to what Krauss has, to my mind rather ambiguously, dubbed the "post-medium condition."

Extending consideration of Benjamin's crucial contribution beyond the 1970s to today's digital art, other aspects of his argument surface with renewed intensity. First, what was once a discrete aesthetic reaction to the capitalist imposition of universal exchangeability across all culture has now become an intrinsic element of technology itself. If, as Krauss emphasizes in comparing Benjamin to Marcel Duchamp, the reproducible work of art correlates with a minimal aesthetic rooted in the simple act of "framing pieces of the world through the camera's lens," this teign of the formal becomes something like a tyranny once the digital offers the possibility for the universal and limitless interconversion of data. Insofar as it operates a wholesale technical equalization of medial materiality, digitization marks the advent of a "post-medium condition" that is, as Friedrich Kittler has forcefully shown, shockingly literal: pushed to its most radical extreme, as it is in Kittler's work, digital convergence promises to render obsolete the now still crucial moment of perception, as today's hybrid media system gives way to the pure flow of data unencumbered by any need to differentiate into concrete media types, or in other words, to adapt itself to the constraints of human perceptual ratios. In the wake of the transformations that give rise to such claims, the correlation Benjamin foregrounds between the formalist aspect of the aesthetic act and the physiological shock-effect of modernist art takes on an unprecedented significance. Indeed, this

correlation lends a newfound specificity to the oft-celebrated redemptive dimension of Benjamin's aesthetics, for if the hyposratization of the formal act of framing reality vacates the artwork of its Romantic trappings (specifically, its autonomy and its objective status as the hearer of truth or the idea), and if the shock-effect relocates the impact of the work squarely in the domain of experience, this is all in the service of a redemption of embodied experience: a renewed investment of the body as a kind of *converter* of the general form of framing into a rich, singular experience. One might even characterize this properly creative role accorded the body as the source for a new, more or less ubiquitous form of aura: the aura that belongs indelibly to *this* singular actualization of data in embodied experience.

In *New Philosophy for New Media*, I attempt to fill out this picture, merely suggested in Benjamin's late work, by correlating the aesthetics of new media with a strong theory of embodiment.¹ (For clarity's sake, let me specify that I am using the term "embodiment" in the sense it has been lent by recent work in neuroscience: as inseparable from the cognitive activity of the brain.)² In line with this understanding and in order to develop an account of new media embodiment, I propose to reconsider French philosopher Henri Bergson's theory of perception and, in particular, to take seriously the crucial emphasis Bergson places on the body as what he calls "a center of indetermination within an acentered universe." On Bergson's account, the body functions as a kind of filter that selects, from among the universe of images circulating around it and according to its own embodied capacities, precisely those that are relevant to it. This emphasis on the body takes center stage at the very beginning of Bergson's *Matter and Memory*, where he explains its function as a privileged image among images:

[T]here is *one* [image] which is distinct from all the others, in that I do not know it only from without by perceptions, but from within by affections: it is my body. I examine the conditions in which these affections are produced: I find they always interpose themselves between the excitations that I receive from without and the movements which I am about to execute, as though they had some undefined influence on the final issue. . . . [T]he act in which the affective state issues is not one of those which might be rigorously deduced from antecedent phenomena, as a movement from a movement; and, hence, it really adds something new

to the universe and to its history. . . . *All seems to take place as if, in this aggregate of images which I call the universe, nothing really new could happen except through the medium of certain particular images, the type of which is furnished me by my body.* . . . My body is, then, in the aggregate of the material world, an image which acts like other images, receiving and giving back movement, with, perhaps, this difference only, that my body appears to choose, within certain limits, the manner in which it shall restore what it receives.³

Regardless of how more recent critics have understood him, to my mind Bergson remains first and foremost a theorist of embodied perception: with his central concepts of affection and memory—both of which are said to render perception constitutively *impure*—Bergson correlates perception with the concrete life of the body.

Bergson's understanding of the embodied basis of perception derives from his more general philosophical project, set out in the first chapter of *Matter and Memory*, to overcome the symmetrical errors of idealism and realism by *deducing* perception from matter. According to Bergson, the world is composed of an aggregate of images, and perception demarcates the selection of a subset of this aggregate by a "center of indetermination." The philosophical problem he faces is how to reconcile the specific aggregate of images that appears to my body functioning as such a center of indetermination and the aggregate of images that comprises the universe as a whole: "How is it," he asks, "that the same images can belong at the same time to two different systems: one in which each image varies for itself and in the well-defined measure that it is patient of the real action of surrounding images; and another in which all images change for a single image and in the varying measure that they reflect the eventual action of this privileged image?"⁴ His solution is to reconfigure perception as a *diminution* or *subtraction* from the universe of images: what distinguishes my perception of a material object from that object as it is in itself is not something internal to my brain or something added by me (as it is for idealist positions), but the fact that I can perceive it only by isolating certain of its aspects, leaving the rest aside.

For all his effort to balance the two systems of images, Bergson's deduction of the body as a center of indetermination commits him to endow the

body with strongly creative capacities. If the affective body introduces specific constraints on what can constitute relevant aspects of an image, then it can legitimately be said to condition its own deduction from the universe of images. Indeed, Bergson's theorization of perception as an act of subtraction installs the affective body smack in the center of the general deduction of perception:

[A]n image may *be* without *being perceived*—it may be present without being represented—and the distance between these two terms, presence and representation, seems just to measure the interval between matter itself and our conscious perception of matter. . . . [Nonetheless,] the representation of an image [is] less than its presence [and it suffices] that the images present should be compelled to abandon something of themselves in order that their mere presence should convert them into representations. . . . Representation is there, but always virtual—being neutralized, at the very moment when it might become actual, by the obligation to continue itself and to lose itself in something else. To obtain this conversion from the virtual to the actual, it would be necessary, not to throw more light on the object, but, on the contrary, to obscure some of its aspects, to diminish it by a greater part of itself, so that the remainder, instead of being encased in its surroundings as a *thing*, should detach itself from them as a *picture*. Now, if living beings are, within the universe, just "centers of indetermination," and if the degree of this indetermination is measured by the number and rank of their functions, we can conceive that their mere presence is equivalent to the suppression of those parts of objects in which their functions find no interest. They allow to pass through them, so to speak, those external influences which are indifferent to them; the others isolated, become "perceptions" by their very isolation.⁵

What is more, Bergson places his emphasis on the body as a source of action; it is the action of the body that subtracts the relevant image from the universal flux of images: "Our representation of matter is the measure of our possible action upon bodies: it results from the discarding of what has no interest for our needs, or more generally, for our functions."⁶

Despite his own condemnation of cinema in *Creative Evolution*, Bergson's theory of perception, and specifically his understanding of the body as a

center of indetermination, furnishes the basis for a philosophical understanding of image media. This, of course, is an affiliation that has already been put to good use by French philosopher Gilles Deleuze in his two-volume study of the cinema. Deleuze's great insight is to have realized that Bergson's conception of the image finds perfect instantiation in the cinema; according to Deleuze, Bergson was mistaken to condemn cinema as a spatialization of flux, since his concept of the movement-image actually describes a more nuanced understanding of cinema. The key notion here is that of the interval (as in montage cinema), which, in constituting a cut between shots, introduces "a gap between the action and the reaction."⁷ For Deleuze, this function of the cut, and of framing to which it is immediately related, is perfectly homologous with that of the body as a center of indetermination: the process by which the body isolates certain aspects of images to generate perceptions is, Deleuze insists, "an operation . . . exactly described as a *framing*: certain actions undergone are isolated by the frame and hence, . . . are forestalled, anticipated."⁸ Yet, in order to assert this homology, Deleuze finds himself compelled to bracket Bergson's embodied concept of affection—affection as a constitutive *impurity* of *this* body's perception—and to offer in its place a formal understanding of affection as a specific permutation of the movement-image. Affection as a phenomenological modality of bodily life gives way to affection as a concrete type of image—the affection-image—defined exclusively by the protracted interruption of the sensorimotor circuit, the interruption, that is, of the *form* of the movement-image.

Deleuze's neo-Bergsonian account of the cinema carries out the progressive disembodying of the center of indetermination. This disembodying reaches its culmination in the second volume of his study devoted to what he calls the "time-image." In a certain sense, the time-image—an image that, rather than subordinating time to movement in space, presents time directly—can be understood as a realization of the cinema's capacity to instance the universal flux of images, or more exactly, to divorce perception entirely from (human) embodiment. While the montage cut and the frame—both central in the first volume of Deleuze's study—remain homologous to the diminution that constitutes perception on Bergson's account, the "interstice between two images" that marks the direct presentation of time literally *instantiates* the uni-

versal variation of images: "If the cinema does *not* have natural subjective perception as its model, it is because the mobility of its centers and the variability of its framings always lead it to restore vast acentered and deframed zones. It then tends to return to the first regime of the movement-image; universal variation, total, objective and diffuse perception."⁹ By rendering cinema homologous with the universal flux of images as such, Deleuze effectively imposes a purely formal understanding of cinematic framing and thus suspends the crucial function accorded the living body on Bergson's account.

To deploy Bergson's embodied understanding of the center of indetermination as the theoretical basis for our exploration of new media art, we will have to redeem it from Deleuze's transformative appropriation. In the most general sense, this will require us to defend the sensorimotor basis of the human body from the assault Deleuze wages against it. To do so, we will have to revise our conception of the sensorimotor itself. For the body that surfaces in the wake of the digital revolution—the very body that forms the "object" of contemporary neuroscience—has scant little in common with the associational sensorimotor body of Deleuze's *Cinema 1*. The sensorimotor dimension of this contemporary body comprises far more than the passive correlate of linkages between images, and indeed, serves to accord the body creative capacities—what Brian Massumi has recently theorized as the potential to broker qualitative difference: "If you start from an intrinsic connection between movement and sensation," notes Massumi, "the slightest, most literal displacement convokes a qualitative difference, because as directly as it conducts itself it beckons a feeling, and feelings have a way of folding into each other, resonating together, interfering with each other, mutually intensifying, all in unquantifiable ways apt to unfold again in action, often unpredictably."¹⁰ Insofar as the sensorimotor nexus of the body opens it to its own indeterminacy, it is directly responsible for the body's constitutive excess over itself. In this respect, motion functions as the concrete trigger of affection as an active modality of bodily action. In what follows, I shall call this "affectivity": the capacity of the body to experience itself as "more than itself" and thus to deploy its sensorimotor power to create the unpredictable, the experimental, the new. Active affection or affectivity is precisely what differentiates today's sensorimotor body from the one Deleuze hastily dismisses: as a capacity to experience its own

intensity, its own margin of indeterminacy, affectivity comprises a power of the body that cannot be assimilated to the habit-driven, associational logic governing perception.

This broadly Bergsonian theme is given its most forceful expression in philosopher Gilbert Simondon's account of the process of individuation.¹¹ According to Simondon, affectivity is precisely that mode of bodily experience which mediates between the individual and the preindividual, the body and its "virtual" milieu: whereas perception appeals to structures already constituted in the interior of the individuated being, affectivity "indicates and comprises this relation between the individualized being and preindividual reality: it is thus to a certain extent heterogeneous in relation to individualized reality, and appears to bring it something from the exterior, indicating to the individualized being that it is not a complete and closed set [*ensemble*] of reality."¹² As the mode of experience in which the embodied being lives its own excess, affectivity introduces the power of creativity into the sensorimotor body.

Beyond simply defending the sensorimotor body, our effort to redeem Bergson's embodied conception of the center of indetermination will ultimately require us to reverse the entire trajectory of Deleuze's study, to move not from the body to the frame, but *from the frame (back) to the body*. What we will discover in the process is that the frame in any form—the photograph, the cinematic image, the video signal, and so on—cannot be accorded the autonomy Deleuze would give it since its very form (in any concrete deployment) reflects the demands of embodied perception, or more exactly, a historically contingent negotiation between technical capacities and the ongoing "evolution" of embodied (human) perception. Beneath any concrete "technical" image or frame lies what I shall call *the framing function* of the human body *qua* center of indetermination.

This change in the status of the frame correlates directly with the so-called digital revolution. If the embodied basis of the image is something we can grasp clearly only now, that is because the so-called digital image explodes the stability of the technical image in any of its concrete theorizations. Following its digitization, the image can no longer be understood as a fixed and objective viewpoint on "reality"—whether it be theorized as frame, window, or mirror¹³—since it is now defined precisely through its almost complete flexibility and addressability, its numerical basis, and its constitutive "virtuality."

Consider, in this regard, the account offered by French engineer and media artist, Edmond Couchot:

A numerical image is an image composed of small "discrete" fragments or elementary points, to each of which can be attributed whole numerical values that position each of them in a system of spatial coordinates (in general of the Cartesian sort), in two or three dimensions. . . . These numerical values render each fragment an entirely discontinuous and quantified element, distinct from other elements, on which is exercised a total command. The numerical image manifests as a matrix of numbers (a table composed of columns and rows) contained in the memory of a computer and capable of being translated through the form of a video or print image. One can from this point on integrally synthesize an image by furnishing the computer with the matrix of values adequate to each of these points.¹⁴

If the digital image is an accumulation of such discontinuous fragments, each of which can be addressed independently of the whole, there is no longer anything materially linking the content of the image with its frame, understood in its Bergsonian-Deleuzian function as a cut into the flux of the real. Rather, the image becomes a merely contingent configuration of numerical values that can be subjected to "molecular" modification, that lacks any motivated relation to any image-to-follow, and indeed that always already contains all potential images-to-follow as permutations of the set of its "elementary" numerical points. This situation has led new media critic Lev Manovich to proclaim the obsolescence of the image in its traditional sense: since the digital image culminates the transition from an indexical basis (photography) to sequential scanning (radar), it substitutes for the image proper a processural realization of information in time that appears as a traditional image only for contingent reasons (i.e., because scanning is fast enough to simulate the appearance of a static image).¹⁵

Why is it, then, that we continue to speak of the image, even following its digital transfiguration (dissolution)? Why do we take recourse to a hybrid conception of the image as, at once, an analog surface and a digital infrastructure?¹⁶ Why, given the disjunction between surface appearance and materiality, do we continue to associate a given set of numerical coordinates or of information

with a visually perceivable form? Manovich's concepts of the "image-interface" and the "image-instrument" speak directly to this set of questions, insofar as they subordinate the image to the bodily manipulation of information. As interface or instrument, the image does not comprise a representation of a pre-existent and independent reality, but rather a *means* for the new media user to intervene in the production of the "real," now understood as a rendering of data. "New media," Manovich concludes, "change our concept of what an image is—because they turn a viewer into an active user. As a result, an illusionistic image is no longer something a subject simply looks at, comparing it with memories of represented reality to judge its reality effect. The new media image is something the user actively *goes into*, zooming in or clicking on individual parts with the assumption that they contain hyperlinks. . . ."¹⁷

As I see it, digitization requires us to reconceive the correlation between the user's body and the image in an even more profound manner. It is not simply that the image provides a tool for the user to control the "infoscape" of contemporary material culture, as Manovich suggests, but rather that the "image" has itself become a process and, as such, has become irreducibly bound up with the activity of the body. Thus, rather than simply abandoning it to its own obsolescence or transforming it into a vehicle for interfacing with information, we must fundamentally reconfigure the image. Specifically, we must accept that the image, rather than finding instantiation in a privileged technical form (including the computer interface), now demarcates the very process through which the body, in conjunction with the various apparatuses for rendering information perceptible, gives form to or *in-forms* information. In sum, the image can no longer be restricted to the level of surface appearance, but must be extended to encompass the entire process by which information is made perceivable through embodied experience. This is what I propose to call the *digital image*.

As a processural and necessarily embodied entity, the digital image lays bare the Bergsonist foundation of all image technology, that is, the origin of the perceivable image in the selective function of the body as a center of indetermination. No matter how "black-boxed" an image technology (or technical frame) may seem, there will always have been embodied perception at/as its origin. In relation to today's electronic technosphere, however, Bergson's theorization of this process of embodied selection must be updated in at least one

important respect: rather than selecting preexistent *images*, the body now operates by filtering *information* directly and, through this process, *creating* images. Correlated with the advent of digitization, then, the body undergoes a certain empowerment, since it deploys its own constitutive singularity (affection and memory) not to filter a universe of preconstituted images, but actually to *enframe* something (digital information) that is originally formless. Moreover, this "originary" act of enfaming information must be seen as the source of all technical frames (even if these appear to be primary), to the extent that these are designed to make information perceivable by the body, that is, to transform it into the form of the image.

This account of how the body enfames information and creates images comprises the theoretical project at stake in the corpus of new media art that I analyze in this book. To support this account, I shall focus on work by various artists who deploy digital technology in order to pursue this "Bergsonist vocation" of framing the digital image. As I see it, the most significant aesthetic experimentations with new media carry on the legacy of Bergson's valorization of intelligence over instinct, and specifically, his understanding of technology as a means of expanding the body's margin of indetermination. Indeed, contemporary media artists appear to be doing nothing else than adapting this Bergsonist vocation to the concrete demands of the information age: by placing the embodied viewer-participant into a circuit with information, the installations and environments they create function as laboratories for the conversion of information into corporeally apprehensible images. Indeed, the bodily dimension of contemporary artistic practice helps explain the continued relevance of the image following its dissolution as a technically stable frame: it is in the form of the image—the visual image above all, but also the auditory image and the tactile image—that digital information is rendered apprehensible. Accordingly, the reinvestment of the image as a contingent configuration of information itself holds the key to the continued relevance—and indeed, to the indispensability—of the human in the era of digital convergence. As the process that yields the image—that transforms formless information into an apprehensible form—framing is crucial to all contemporary new media art practices.¹⁸

My decision to focus on the visual dimensions of the digital image follows directly from the theoretical ambition motivating this project. Rather

than a survey of new media art, my study aims to theorize the correlation of new media and embodiment. Toward this end, I have found it most useful to focus on works by new media artists that foreground the shift from the visual to the affective registers and thereby invest in the multimedia basis of vision itself. In this sense, my decision is above all a strategic one: if I can prove my thesis (that the digital image demarcates an embodied processing of information) in the case of the most disembodied register of aesthetic experience, I will, in effect, have proven it for the more embodied registers (e.g., touch and hearing) as well. Moreover, this strategic decision resonates with the interests of contemporary artists themselves: even those artists not directly invested in these embodied sense registers can be said to pursue an aesthetic program aimed first and foremost at dismantling the supposed purity of vision and exposing its dirty, embodied underside. Following from and extending Bergson's investment in bodily affection, contemporary media art has operated what amounts to a paradigm shift in the very basis of aesthetic culture: a shift from a dominant ocularcentrist aesthetic to a haptic aesthetic rooted in embodied affectivity. As if in direct response to the automation of vision achieved by digital computing, artists have focused on foregrounding the foundation of vision in modalities of bodily sense: insofar as they catalyze an awakening of their viewers to this bodily foundation, the works they create might indeed be understood as efforts to specify what remains distinctly "human" in this age of digital convergence.

We can now gather, under the rubric of the "Bergsonian vocation" of new media art, the three narrative strands that I shall interweave in the concrete analyses to follow. First: how the image comes to encompass the entire process of its own embodied formation or creation, what I shall call the digital image. Second: how the body acquires a newly specified function within the regime of the digital image, namely, the function of filtering information in order to create images. And third: how this function of the body gives rise to an affective "supplement" to the act of perceiving the image, that is, a properly haptic domain of sensation and, specifically, the sensory experience of the "warped space" of the body itself.

In the seven chapters comprising my study, these three threads will combine to tell the story of a fundamental shift in aesthetic experience from a model dominated by the perception of a self-sufficient object to one focused

on the intensities of embodied affectivity. To the extent that this shift involves a turning of sensation away from an "object" and back onto its bodily source, it can be directly correlated with the process of digitization currently well underway in our culture: for if the digital image foregrounds the processual framing of data by the body, what it ultimately yields is less a framed object than an embodied, subjective experience that can only be felt. When the body acts to enframe digital information—or, as I put it, to forge the digital image—what it frames is in effect itself: its own affectively experienced sensation of coming into contact with the digital. In this way, the act of enfaming information can be said to "give body" to digital data—to transform something that is unframed, disembodied, and formless into concrete embodied information intrinsically imbued with (human) meaning.

Each of the seven chapters of my study engages a specific aspect of this coevolution of aesthetics and technology in order to demarcate a concrete stage in the ensuing shift from perception to affectivity.

The three chapters gathered in Part I, "From Image to Body," treat the disjunction of embodied response from its status as a strict correlate of the image in three registers: the aesthetico-historical, the philosophical, and the scientific.

Chapter 1 tackles what is perhaps the key aesthetic question confronting our assimilation of new media: are they really "new," and if so, why? Through analyses of two recent and influential arguments—art historian Rosalind Krauss's conception of the "post-medium condition" and media scholar Lev Manovich's cinematographic empiricism, both of which, to a greater or lesser extent, deny the newness of new media—the chapter urges an investment in the body beyond its strict homology with the "pulsatile" materiality of the image and the cinematic condition of immobility.

Chapter 2 engages the work of pioneering new media artist Jeffrey Shaw as an aesthetic deployment of Bergson's embodied conception of the center of indetermination. In a sustained negotiation with the nexus of image, space, and body, Shaw's career trajectory reveals a gradual displacement of the body's function as a material screen within a physical space of images in favor of the body-brain's capacity to generate impressions of "virtual totality" through selective filtering of information. This transformation in the body's role parallels a material shift in the status of the frame: from a static technical image to an

embodied framing function performed by the viewer. By tracing this aesthetic extension and updating of Bergson's philosophy to a philosophical counter-tradition in the history of cybernetics that insists on the intimate correlation of information and (embodied) meaning, the chapter credits Shaw with articulating the "Bergsonist vocation" that informs contemporary aesthetic experimentation with the digital.

Chapter 3 addresses the transformation in the function and status of visual culture in the wake of the automation of vision. By analyzing artworks that engage photography in its digital form, the chapter foregrounds the vast divide separating scientific and aesthetic responses to the computer mediation of vision: whereas researchers aim to optimize a sightless "vision" that overcomes human perceptual limitations, artists invest in the bodily dimensions that inform (human) vision. Following this analysis, the correlation of image and body can be seen to have come full circle from where we began: rather than forming a quasi-autonomous technical frame that strictly regulates bodily response, the image has now been revealed to be a delimited product of a complex bodily process.

The three chapters comprising Part II, "The Affect-Body," focus on the aesthetic consequences of this disjunction of body from image and the ensuing reembodyment of the latter. Each forms a concrete stage in the philosophical redemption of Bergson's embodied theory of perception from Deleuze's transformative appropriation.

Chapter 4 focuses on the "digital facial image" as a counterpart to the cinematic close-up analyzed by Deleuze. Whereas the close-up is celebrated for its expressive autonomy, the digitally generated facial image functions to catalyze a profound affective reaction in the viewer. By interpreting this difference as a symptom of the radical alienation of the realm of the digital from the phenomenal world of human experience, the chapter associates digitization with a movement from the "affection-image" back to that bodily affectivity which it is said to suspend. As the artworks here analyzed demonstrate, what is at stake in our negotiation with the "digital facial image" is the very possibility of interfacing with the digital, and this possibility, far from involving a disembodiment of the human in the service of computer commands (as is the case in the standard human-computer interface), involves a configuration of digital information with the affective dimensions of human experience.

Chapter 5 engages the "facialization" of the body (or the "imagization of affection") in a far wider domain of scientific, cultural and aesthetic practice: virtual reality (VR). While most applications of VR endorse a disembodied form of visual experience, certain artistic deployments have focused on the constitutive spatial paradox of this alleged "perceptual" technology: the fact that there simply is no external space where virtual perception can be said to take place and where a perceived object can be located. These artistic experimentations with VR thus expose a limitation in Bergson's theory—its fundamental attachment to perception—as it comes to be "instantiated" in the contemporary digital environment. What happens in the experience of these artistic VR environments can no longer be called perception; instead, it is the result of a "body-brain achievement" that creates an internal, bodily space for sensation.

Chapter 6 focuses on a single work by a younger artist, *skulls* (2000) by Robert Lazzarini, which instantiates as its "aesthetic content" the shift from perception to self-affection or affectivity as the dominant phenomenological experience associated with the digital. A sculptural installation that confronts the viewer in "real, physical" space, *skulls* accords a certain generality to the analysis of the preceding chapters. Offering sculptures of four digitally warped skulls to the viewer's gaze, the work solicits perception for what will become an experience of its own short-circuiting. As the viewer tries to negotiate these odd perceptual objects that, it becomes increasingly clear, are not continuous with the space she occupies, she becomes ever more disoriented and disturbed; and as her disorientation mounts, it gradually gives rise to an internal, affective reaction that will ultimately take the place of perception entirely. Insofar as it culminates my defense of Bergson against Deleuze, this affective experience facilitates a corporeal registering of a deformed spatial regime that comprises something like a human equivalent of the alien "space" of the digital. As a "produced analogy" for the digital itself, this corporeal registering revalues the Deleuzian "any-space-whatsoever" by underscoring its fundamental attachment to bodily activity: it results from the displacement of visual (perceptually apprehensible) space in favor of a haptic space *that is both internal to and produced by the viewer's affective body*.

The lone chapter that makes up Part III, "Time, Space, and Body," traces this capacity of the affective body to create haptic space to an even more

fundamental aspect of its function—its continual self-production through an ongoing process of emergence to presence. Engaging the topic of “machine time” that has become most urgent in the face of today’s global telecommunications networks, the chapter invests media art with the capacity to mediate machine time for embodied human experience. Focusing on the digitally facilitated temporal deceleration deployed in the work of artists Douglas Gordon and Bill Viola, the chapter shows how aesthetic experimentation with the digital functions both to enlarge the threshold of the “now” of phenomenological experience and to catalyze an aesthetic experience of this enlargement in the form of an intensification of affectivity. In this way, the potential for new media art to expand the experiential grasp of the embodied human being—that is to say, its Bergsonist vocation—is carried over to the embodied processing of time itself. By opening experience to the subperceptual inscription of temporal shifts (machine time), the work of Gordon and Viola demonstrates why affectivity must be understood to be the condition for the emergence of experience per se, including what we normally think of as perception.

As this brief synopsis makes clear, the argument presented here follows a precise trajectory and is meant to be cumulative. Accordingly, as you make your way through this study, you may find a schematic table useful as a guide. Table I.1 attempts to isolate the permutations undergone by the central pairing of body and image at each stage of the argument.

Table I.1

Chapter	Theoretical Aim	Body	Image	Artwork
1	To liberate the body from its strict correlation with the image	From body as correlate to the pulsatile rhythm of work and as immobilized receptive center for image to body as liberated from both of these limitations	From image as guiding principle of aesthetic experience to image as mere trigger for independent bodily activity	Coleman's Box; Pfeiffer's <i>The Long Count</i> ; ART+COM's <i>The Invisible Shape of Things Past</i> ; Waliczky's <i>The Way</i>
2	To isolate what differentiates body (bodily framing) from the technical image (preconstituted frame)	From body as a physical screen for image to body-brain as a mental source for impression of “virtual totality”	From externally originating source of possible perceptions to product of an internal bodily process (bodily framing of information)	Shaw's <i>Carpoineima</i> , <i>MovieMovie</i> , <i>Viewpoint</i> , <i>Points of View</i> , <i>Inventor la Terre</i> , <i>The Narrative Landscape</i> , <i>Place: A User's Manual</i> , <i>Place: Ruhr</i>
3	To link bodily framing to the bodily “underside” of vision	From body as the center of perception—a disembodying of vision—to body as the contaminating affective basis for human visual experience	From correlate of bodily perception (i.e., vision) to obsolete function (for computer “vision”) to correlate of bodily affection no longer restricted to visual domain	<i>Blade Runner</i> ; Rogala's <i>Lovers Leap</i> ; Waliczky's <i>The Garden</i> , <i>The Forest</i> ; Shaw's <i>Place: A User's Manual</i> , <i>The Golden Calf</i>
4	To restore the intrinsic link of affection with the body	From epoeñe of body in the affection-image to reinvestment of body as the source of affection via a supplementary sensorimotor contact with information	From autonomous affection-image (cinematic close-up) to image as affective response to digital information (“digital facial image”)	Geisler's <i>Counting Beauty 2.1</i> ; van Lamsweerde's <i>Me Kissing Vinoodh (Passionately)</i> ; Carchesne's <i>Portrait no. 1</i> ; Mongrel's <i>If/Then</i> , <i>Sinking Feeling</i> ; Huge Harry

Table I.1 (continued)

Chapter	Theoretical Aim	Body	Image	Artwork
5 ↓	To differentiate affectivity categorically from perception	From transcendence of body in visually dominant VR experience to reinvestment of body-brain as affective source for creation of "virtual" space	From simulation of physical reality to "absolute survey" (nonextended mental apprehension) of bodily generated space	Penny's <i>Fugitive</i> ; Shaw's <i>EVE, I-Cinema</i> ; Gromala's <i>Virtual Dervish</i> ; Scraggins and Dickson's <i>Topological Slide</i> ; Wennberg's <i>Parallel Dimension, Brainsongs</i> ; Smetana's <i>Room of Desires</i> ; Dunning and Woodrow's <i>Einstein's Brain</i>
6 ↓	To correlate affectivity with a shift from visual space to haptic space	From body as source for perception of extended, geometric space to body as affective source for haptic space	From correlate of perceptual gaze to processural affective analogy for the "warped space" of the computer	Lazzarini's <i>skulls</i> ; Kalpakjian's <i>Hall, Duct, HVAC III</i>
7 ↓	To trace the bodily capacity to create space to the temporal basis of affectivity	From affective body as the source for haptic space to affectivity as the bodily origin of experience <i>per se</i> (embodied temporality), including perception	From objective, perceptually apprehensible "object" to "subjective image" that can only be felt	<i>Transverser</i> ; Reinhart and Wiedrich's <i>TX-Transform</i> ; Gordon's <i>24-Hour Psycho</i> ; Viola's <i>Quintet of the Astonished</i>

“processural visibility,” or simply “transformation” incarnate, the video image can only ever make linkages, via the internal technical transformation of the image itself, between images.¹⁷ For purely technical reasons, it simply cannot mark a cut between two series of images. Thus at the same time as it replaces the sensorimotor logic of transition (the classical cinema), video also displaces the formal linkage or irrational logic of the interstice (the modern cinema).

Yet before we rush to endorse current *clichés* about the video image—that it devalues cinema, or in a more Deleuzian vein, that it destroys thought—we would do well to recall the advice with which Deleuze chose to conclude his study of the cinema: whatever hope exists that cinema can be revitalized beyond cybernetics rests in the possibility of pursuing a “new will to art.”¹⁸ Specified in the terms of our analysis, this maxim calls on us to elevate an *aesthetic* deployment of the video image over—and indeed against—its technical capacities.

Perceiving the Video Image

Precisely such a new will to art is at stake in the career of Scottish artist Douglas Gordon, whose work forms something like an anthesis to the literalization of the technical capacities of the video image in *Transverser* and *TX-Transform*. Though Gordon works in a variety of media, his appropriation pieces involving digital manipulation of found film footage are of particular interest to us here. In various works including *24-Hour Psycho* (1993), *Confessions of a Justified Sinner* (1996), *Through a Looking Glass* (1999), *left is right and right is wrong and left is wrong and right is right* (1999), *Déjà Vu* (2000), and *5 Year Drive-By* (1995–present), Gordon engages with issues of cinematic time, the time-image, and specifically the interstice or “between two images.” Moreover, Gordon engages the temporal dimension of cinema through a practice that is specific to video not simply or primarily as a technical image medium but as the privileged mode through which images, as the material basis of contemporary perception, are actually lived or experienced. Gordon’s essays and interviews repeatedly emphasize this aspect of video: again and again he insists that video time—the time of slow-motion, freeze-framing, and repetition—is the “given time” of his generation. Having grown up with

the video recorder, this generation “has lived a different relation to the cinema,” one in which video slow-motion and freeze-framing function less as analytical techniques (as they were for an earlier generation of film scholars) than as instruments of desire: “with the arrival of the VCR,” Gordon recounts, we lived a “different film culture, a replay culture, and a slow-motion take on things.”¹⁹

Only in this context can we appreciate Gordon’s account of the seminal moment in his apprenticeship as an artist—the genesis of *24-Hour Psycho*:

In 1992 I had gone home to see my family for Christmas and I was looking at a video of the TV transmission of *Psycho*. And in the part where Norman (Anthony Perkins) lifts up the painting of *Suzanna and the Elders* and you see the close-up of his eye looking through the peep-hole at Marion (Janet Leigh) undressing, I thought I saw her unhooking her bra. I didn’t remember seeing that in the VCR version and thought it was strange, in terms of censorship, that more would be shown on TV than in the video, so I looked at that bit with the freeze-frame button, to see if it was really there.²⁰

This experience of the discordance between the TV and video versions of the film left Gordon with an overwhelming sense that, to put it in the terms of *cliché*, there is more there than meets the eye: that the flow of images itself—and specifically, the “space” between images—contains a wealth of information not directly presented by a given (and indeed by *any* given) viewing apparatus. The result, of course, is the work that marked Gordon’s appearance on the international art stage—the monumental *24-Hour Psycho* (1993). In *24-Hour Psycho*, Gordon treats Hitchcock’s most famous film as a piece of found footage that he reframes through technical modification and institutional displacement: specifically, he slows down its projection speed to 2 frames a second (instead of 24) and presents it in the space of an installation where the viewer-participant is encouraged to walk around what is in fact a double-sided image of the film projected on an elevated screen (figure 7.3).

The effect of this radically decelerated and decontextualized presentation of Hitchcock’s most familiar film is an eerie experience of protracted

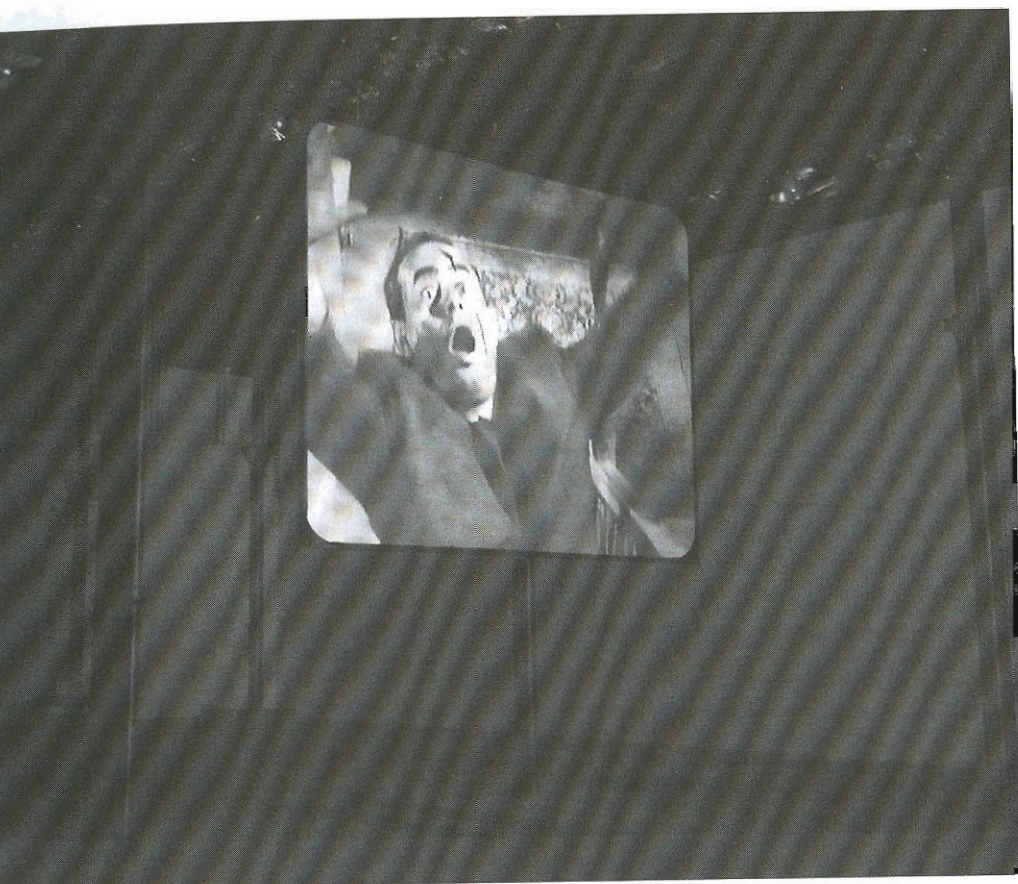


Figure 7.3
Douglas Gordon, *24-Hour Psycho* (1993).
Projects Hitchcock's *Psycho*
over twenty-four
hours (at two frames a
second) in order to fore-
ground the problematic
viewer anticipation.

anticipation accompanied by a sobering insight into temporal relativity. Since the time any viewer has to devote to *24-Hour Psycho* is limited (in the extreme case, to the opening hours of a museum or gallery), her capacity to perceive the work is itself severely constrained (since no perception of the whole film is possible) and radically dependent on where precisely the film is in its progression when she enters to perceive it. More significantly still, these twin lessons concerning the intrinsic excess of "given time" are brought home to the viewer through the dynamics of affective anticipation: since the image changes only once every twelve seconds, the viewer quickly finds her attention intensely concentrated on anticipating this moment of change; moreover, as the viewer be-

comes more and more caught up in the halted progression of the narrative, this process of anticipation becomes ever more affectively charged, to the point of becoming practically unbearable.

Despite his attraction to material rich in psychological qualities,²¹ Gordon's technical modifications of cinema are designed specifically to induce particular physiological effects: in various ways, his works submit their audiences to experimentations that call into play—and thus call attention to—the body's mediation of the interstice or between-two-images. Accordingly, the time-image Gordon foregrounds is one that must be said to occur in the act of reception, in the concrete activity performed by the embodied viewer-participant as she grapples with the specific problematic staged in the various works. In a way that resonates with contemporary neuroscientific research on perception, Gordon describes this time-image as a certain relativization not of the time frameworks within the image or between images in the film, but of the time frameworks of lived experience itself: "A lot of the work for me is about trying to induce a perceptual shift from where you are to where you were or where you might be. I'm fascinated by the fact that as a human being you can coexist on various levels simultaneously. So if someone was in a gallery and caught ten minutes of *24-Hour Psycho*, later, when they were out shopping, they might remember that it was still happening."²²

To make this point concrete, we need simply enumerate a handful of Gordon's most important strategies: (1) temporal deceleration (central to *24-Hour Psycho* as well as *Five Year Drive-By*, a planned public projection of *The Searchers* over a five-year period); (2) foregrounding the moment of perceptual shift (as in *Confessions of a Justified Sinner* [figure 7.4], where inverted negative images of Dr. Jekyll's transformation into Mr. Hyde are set into a perpetual loop); (3) mirtoting with slight temporal discordance (as in *Through the Looking Glass* [figure 7.5], where slightly diverging twin images of the scene from *Taxi Driver* featuring Robert DeNiro pulling a gun and speaking to himself in a mirror are placed on opposite walls of a gallery); (4) exposing perceptual shift as the very texture of perception (as in *left is right and right is wrong and left is wrong and right is right* [figure 7.6], where Otto Preminger's obscure 1949 film noir, *Whirlpool*, is projected in reversed images on two screens, one of which presents every odd frame of the film and the other, every even frame); and (5) catalyzing the relativization of time within the viewer's body (as in *Déjà-Vu*



Figure 7.4
James Gordon, *Confessions of a Justified Sinner* (1955). Via inverted, negative images of J. Edgar
Hoyt's transformation into Mr. Hyde in
the moment of personal shift is insis-
tently foregrounded.

(figure 7.7), where three projections of *DOA*, at respectively 23fps, 24fps, and 25fps, are placed one beside the other).

Contrasted with Deleuze's conception, Gordon's deployment of these strategies relocalizes the time-image from a purely mental space contained, as it were, within or between the formal linkages of a film, to an embodied negotiation with the inbetween or between-two-images that necessarily takes place *in the body-brain of each specific viewer-participant*. At stake here is more than just another variant of the Deleuzian time-image, however, since Gordon's practice engages a model of cognition and of the physiological processing of images fundamentally at odds with Deleuze's. Whereas Deleuze sees the time-image as marking a fundamental break with the sensorimotor logic of the movement-image, Gordon's work constructs the time-image *on the basis of a refined sensorimotor interval*—of the sensorimotor interval specific to the process of neural selection as understood by contemporary neuroscience. Unlike the sensorimotor interval at work in the cinema of the movement-image, this refined sensorimotor interval is not immanent to the logic of the image or of film as the att



Figure 7.5
Douglas
Through
Glass (1959).
posed so
scene fr
slight di
projectio
jects mi
tempora



Figure 7.6
Douglas
right and
and left
right is n
Projects
Whirlpo
images o
one show
scenes, o
exposes
as the ve
percepti



7.7
s Gordon, *Déjà Vu*
Projects DOA on
screens at 23, 24,
frames per sec-
pectively; thereby
zes time within
wer's body.

of moving images, but emerges directly from the human processing of information. Consequently, it is a sensorimotor interval that taps the potential of the body to exceed its own contracted habits and rhythms.

Accordingly, Gordon's work can be said to expose the fundamental limitation of Deleuze's cinema of the brain: its investment in an isomorphism between the time-image and the contemporary brain. This investment necessarily follows from Deleuze's decision to situate time within the virtual dimension opened by the interstice; for him, such an isomorphism is the necessary consequence of the differentiation between classical and modern cinema, as the contrast between Eisenstein's and Alain Resnais's intellectual cinemas makes clear: "intellectual cinema has changed, not because it has become more concrete (it was so from the outset), but because there has been a simultaneous change in our conception of the brain and our relationship with the brain."²³ In contrast with Eisenstein's intellectual cinema, which focused on the sensorimotor production of dialectical concepts, Resnais's intellectual cinema functions to

catalyze fundamentally "new orientations" in the cerebral processes of the "indeterminate brain."²⁴ When Deleuze suggests that invention in the cinema doubles and must be doubled by invention in the brain—that new circuits in the cinema generate new cerebral circuits—he effectively renders the time-image something that can only be thought. Put another way, by strictly correlating the presentation of the outside in cinema with a modification of the brain, Deleuze asserts a *direct* transmission of the force of time into thought.²⁵

Gordon's work contests Deleuze's model of the time-image precisely by questioning such a direct transmission of time into experience. By producing the time-image as/in the viewer-participant's richly embodied physiological response to the interstice or between-two-images, Gordon's work questions not just the abstract isomorphism central to Deleuze's model of the modern cinema, but specifically the model of the brain as "irrational," "indeterminate," and beyond the sensorimotor. Indeed, Gordon's experimentations with the temporal limits of visual art force us to confront the origin of temporal consciousness (and hence consciousness *per se*) in the experience of affectivity that neurobiologist Francisco Varela has recently identified with the Husserlian category of "protention." In this way, Gordon's works directly engage the complex neural processing underlying the time-image, from its "origin" in the preconceptual experience of a "primordial fluctuation" to its "occurrence" as a neural emergence.

Refining the Sensorimotor

Varela's recent work on time consciousness and affectivity marks a refinement of his ongoing effort to grasp the autopoietic basis of human perception.²⁶ In this work, he seeks to correlate phenomenology and neurobiology—lived experience and its embodied basis—through "mutual constraints provided by their respective descriptions."²⁷ To that end, Varela attempts to furnish a neural correlate for Edmund Husserl's explorations of internal time consciousness and specifically for two central achievements of Husserl's analysis: the complex texture or "thickness" of the present (retention, nowness, protention) and the notion that temporal consciousness *itself* constitutes an ultimate substrate of consciousness, that time is less an object of consciousness than its very foundation. Varela pursues this task by arguing for the primacy of affectivity in the

human experience *qua* living.⁵⁵ Following Bergson, we must allow the now of perception to become contaminated with affectivity: we must identify the now with that threshold within which perception of the flux of an object affects itself, and thus generates a supplementary perception, a perception of the flux itself, time-consciousness.

The "Subjective" Image

By correlating the physiological threshold of the present now, the priority of protention, and affectivity, Varela's analysis pinpoints the two basic limitations of Stiegler's approach: its fundamental orientation toward memory and the past and its decision to ground the openness to the future exclusively in the essential incompleteness of the present.⁵⁶ To overcome these limitations, we now need to explore the impact of the technical contamination of time-consciousness on our understanding of human temporal consciousness as fundamentally future-directed.

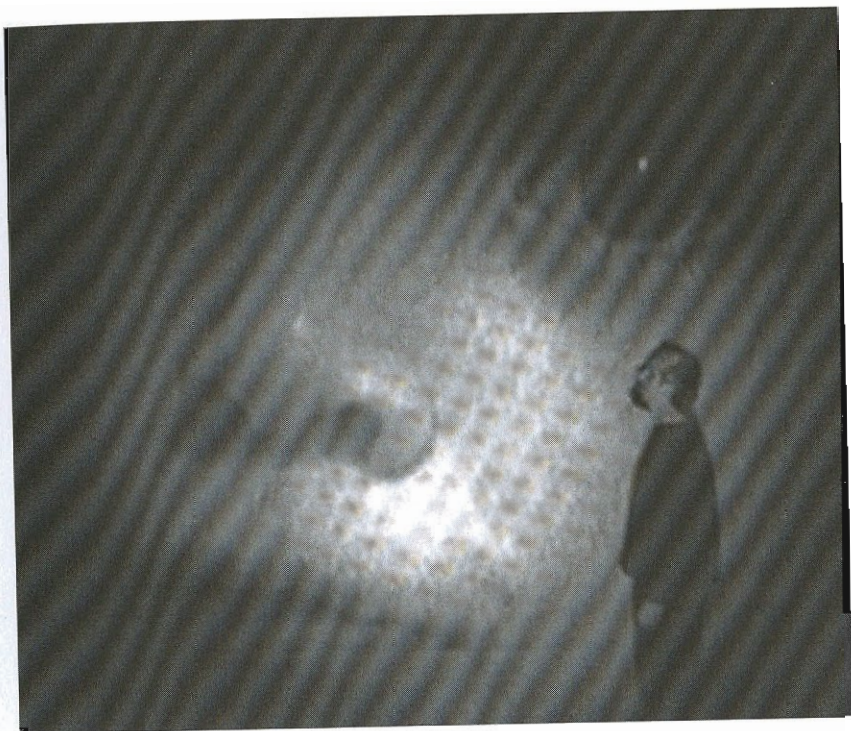
Among contemporary artists working with new media, it is the work of Bill Viola that can best guide us in this exploration. In his recent aesthetic experimentation with radical temporal acceleration and deceleration, Viola has deployed cinema and video technologies in order to enlarge the now in a manner that is precisely antithetical to cinema's role as the exemplary support for tertiary memory. Rather than opening the now to the past, to the nonlived experience materialized in technical objects, Viola's aesthetic experimentation with new media intensifies the now by literally overloading it with stimuli (units of information) that are properly imperceptible (i.e., imperceptible to natural perception).⁵⁷ In his current *Passions* series, which includes works like *Quintet of the Astonished* (2000), *Quintet of Remembrance* (2000), *Anima* (2001), *Six Heads* (2001), and *Man of Sorrows* (2001), Viola uses a technical capacity intrinsic to cinema, the capacity to shoot at high-speed, extended and transformed by video, in order to contaminate the perceptual present with a nonlived that is not, as in photography or the cinema of the time-image, the recurrence of a tertiary past, but rather *the material infrastructure of the enlarged now itself*, or in other words, the affective texture of the neuro-dynamics that, as Varela has shown, conditions time-consciousness.

Since the formal principle is the same in all of these works, I shall focus on one of them, *Quintet of the Astonished* (2000), whose clear iconographic references and complexity make it exemplary of the series. Inspired by Hieronymus Bosch's *Christ Mocked* (c. 1490), with references to Caravaggio and the Weeping Mary, the sixteen-minute video features five figures, four male and one female, who appear to undergo extremely subtle, at times literally imperceptible, shifts in emotional, or better, affective tonality (figure 7.8). Without a doubt, the experience afforded by this work can be described as one of affective attunement: by presenting what psychoanalyst Daniel Stern has called "vitality affects" (as opposed to "categorical affects" or emotions)—that is, normally imperceptible facial cues that signal the very fact of the body's aliveness—the affective shifts on the faces of the represented figures trigger richly nuanced resonances in the body of the viewer. These resonances can be understood as a kind of embodied correlate of the microphysical stimuli themselves (i.e., the machinic registration of temporal phenomena).⁵⁸

Viola has explained that the motivation of this piece, and of the series as a whole, comes from his own wonder at the paradoxical duplicity of emotions—their status as both the most fleeting of experiences and in some curious sense autonomous from or outside of experience.⁵⁹ This duplicity was brought home to the artist in a project he undertook in 1987 involving the videotaping of a children's birthday party. Noting that of all beings, children wear their emotions right on the surface, Viola recounted being dumbstruck by his observation of joy literally growing and moving through the faces of his subjects. When, later in the process of creating what would become his 1987 piece, *Passage*, Viola had the opportunity to observe his footage as still images, he found himself dumbfounded once again, this time by the fact that even in a still image, which, after all, represents a cut with a duration of 1/30 of a second (in video) and which is therefore well below the neurophysiological threshold of the now, there was not only an excess of emotion, but a certain temporal expansion of it beyond the confines of what was captured in the image (figure 7.9). In something like an equivalent of Douglas Gordon's inspirational viewing of *Psycho* on television, this seminal moment gave Viola a certain insight that would become the catalyst for his later work. Yet whereas Gordon became attuned to the rich expansiveness of the "between-two-images," Viola was

Figure 7.8
Bill Viola, *Quintet of the Astonished* (2000). Shot at high-speed but projected at normal speed, this film of five figures undergoing extreme emotional change supersaturates the image with ordinarily imperceptible affective content. (See plates 10, 11.)





struck by the peculiar autonomy of emotion from the temporal flux of perception. The experience of the still image as exuding a rich plenitude of emotion, as an extreme contraction of intensity, led Viola to conclude that "emotions are outside of time," that they "exist somewhere outside of time."⁶⁰

Now this difference between Viola's and Gordon's glimpses into the temporality of mediated images is in no way a trivial one, since it is precisely Viola's insight into the autonomy of emotion from time—and thus *from any temporal fixation of it in any particular medium*—that makes his work the exemplar of the medial revolution I have been exploring in this book: the movement of new media art beyond cinema. Whereas Gordon takes the cinematic object as a given (he literally works with found, that is, already constituted material) in order to pressure the correlation of its objective flux and the flux of the viewing consciousness to the point of its breakdown,⁶¹ Viola contaminates cinema with video (and vice versa) in a way that transforms the resulting hybrid (cinema-video) in a fundamental manner.⁶² Specifically, by exploiting the

technical capacity to shoot film at high-speed and then, following its conversion to digital video, to project it at normal speed, Viola manages to invert its "intentionality" as a temporal object such that rather than taking the viewer through an experience of the past, it brings her face-to-face with the temporal (affective) dynamics underlying the emergence of the present.

Viola shot *Quintet of the Astonished* on high-speed film (roughly 16 times faster than normal speed, or 384 fps), which was subsequently digitally converted to video and projected at normal speed. Accordingly, the roughly 16-minute video shows events that actually transpired in the space of about one minute. What is crucial about Viola's technique, however, and what distinguishes it from Gordon's radical use of slow-motion, is that he exploits the recording potential of film to its fullest: *each second of film encompasses (roughly) 384 (i.e., 16×24) increments of motion, 384 discrete captures of information*. Playing this back at normal speed (at 24 fps though now "channeled" through video's 30 fps) literally exposes the viewer to the imperceptible: to incredibly minute shifts in affective tonality well beyond what is observable by (nontechnically supplemented) natural perception. When the viewer takes in this intensely oversaturated temporal object, the guiding mechanism of cinematic temporality—the perceptual coincidence between the flux of the film and that of consciousness—gives way to a kind of affective conragion through which consciousness, by being put face-to-face with what it cannot properly perceive and yet what constitutes the very condition out of which the perceivable emerges, undergoes a profound self-affectation. In this incredibly intense experience, consciousness is made to live through (affectively, not perceptually) the very process through which it continually emerges, from moment to moment, as the selection from a nonlived strictly contemporaneous with it (the nonactualized, virtual potentialities vying against one another in Varela's model of neuro-processing as "fast dynamics").

We can thus say that Viola's work deploys media to catalyze a temporal experience that moves beyond the "cinematographic grammatization" that, for Stiegler, forms the basis for contemporary real-time media (the global televisual system) and for the age of digital television to come:⁶³ what Viola shows is that media, far from being the vehicle for a reproduction (writing, grammatization) of life, is a mechanism for exposing the fundamental correlation of life with what Gilbert Simondon calls the "preindividual," the domain of a nonlived

that is strictly contemporaneous with the living and that forms the condition of possibility for its continued viability in the future.

It is no accident that, in Simondon's much neglected ontology, this exposure to the preindividual occurs through the experience of affectivity, which names a modality that differs fundamentally from perception. While perception draws on already constituted organic structures, affectivity mediates between the constituted (organic) individual and the preindividual milieu to which this being is structurally coupled. Whereas the faculty of perception has already been completely individuated and can thus be exercised only within fixed constraints, affectivity comprises the faculty of the new: it is the modality through which the individuated being remains incomplete, which is to say—in *contradistinction* to the Stieglerian–Derridian problematic of a memorial incompleteness—open to the force of the preindividual, to that which it is not, or most accurately, to its own constitutive excess, its being essentially out-of-phase with itself. As an extension, indeed a coherent working-through, of the Bergsonist category of affection, Simondon's concept of affectivity explains, justifies, and lends significant nuance to my neo-Bergsonist claim that perception is necessarily anchored in the activity of the body via the modality of affect. More precisely, affectivity names the capacity for the body to be radically creative, that is, to be the agent of a framing of digital information that generates images independently of all preexistent technical frames.

Viola's work thus does for protention what cinema (following Stiegler's analysis) does for retention: namely, operate its technical contamination by that which has traditionally been subordinated, if not simply nonexistent, to it. Indeed, if Viola's particular experimentation with the temporal flexibility of new media exposes the complication of protention by the nonlived that is contemporaneous with it, it *necessarily* introduces technicity into time-consciousness. Unlike Stiegler's tertiary memory, however, this technicity is strictly contemporaneous with the protentional dimension of time-consciousness: far from furnishing a nonlived *content* that exposes the selectional basis of retention, it comprises a techno-functional extension of *protention itself*, one that exposes the selectional process through which consciousness extends itself into the future. Viola's work thus installs the technical supplement smack in the heart of the present itself: as a techno-functional extension of protention, new media technology operates entirely within the interval of the now, as the supplement

of protention that, by oversaturating the now with information, enlarges it, and by enlarging it, catalyzes the self-affectation of consciousness that is constitutive of time-consciousness. In sum, new media technology mediates the openness of protentional consciousness to the nonlived—and indeed the properly nonlivable—domain of the preindividual and thus reveals affectivity as being always already, that is, essentially, contaminated by technicity.

What this means, ultimately, is that we must identify the flux of consciousness not with the flux of the intermediary temporal object, but *with the flux of affectivity itself*. For this reason, the isomorphism constitutive of cinematographic grammarization—between machinic and spectatorial synthesis—no longer holds in the context of new media.⁶⁴ The machinic synthesis is accordingly demoted to the role of mediator in *Quintet of the Astonished*: far from controlling the flux of spectatorial consciousness, the machinic synthesis has become a mere instrument facilitating the “communication” between the domain of properly imperceptible microphysical stimuli and the phenomenological dimension of affectivity constitutive of the essential openness of human beings to the future. Viola's work can thus be said to enlarge the now precisely by putting perception into the service of affection, or in other words, by opening perception to the very principle of its own self-perpetuation, to its own radical imperceptible—*affectivity*.

In this way, Viola's work anticipates a new configuration of human experience and machinic recording that can help us tap into the potential that “machine time” holds for extending the scope of the perceptual now and thus, in a way that pushes the Bergsonist vocation toward its most radical potential, for expanding our grasp over the material world. By deploying media technology within a framework of digital convergence (yet in a way that refuses Kittler's dedifferentiation) in order to bring the properly imperceptible, microphysical machinic inscription of matter (time) into the sphere of human experience, Viola's work exemplifies a digital aesthetic that not only looks beyond current media forms (and thus breaks with the “cinematocentrism” plaguing most accounts of new media), but actively seeks to reconfigure in a fundamental—and fundamentally empowering—way the correlation of the human with the technical. In short, Viola's aesthetic deprivileges the technical frame (Stiegler's machinic synthesis) in favor of the framing activity of a body affectively open to the nonlivable, nonactual, and imperceptible. For this reason,

the aesthetic he exemplifies can be said to deploy the digital toward a truly creative end, one that can be creative precisely because it causes to pass through the human (the spectatorial synthesis) the properly imperceptible—that which is nonsynthesizable within the temporal range of human perception.

This digital aesthetic thus seeks to tap the potential of the digital following a trajectory precisely antithetical to the one followed by both Kittler and Stiegler, but that nonetheless borrows something from each. Like Kittler's digital convergence, the digital aesthetic at issue here recognizes and accepts the autonomy of the technical in the form of digital information; yet, rather than viewing this as a threat to human experience, as a material shift that makes human perception henceforth irrelevant, it seeks to pinpoint and exploit the potential of information to empower the human, to enlarge the scope of the human grasp over the material world—in short, to assist the human in framing information in order to create images.⁶⁵ And like Stiegler's cinematographic grammatization, this digital aesthetic grammatizes life—or, more exactly, “overgrammatizes” life—in the sense that it deploys technology to inscribe the microphysical traces of the material flux that it subsequently delivers to the spectatorial synthesis; as an “overwriting” of life, the inscription of a potentiality (the preindividual) that exceeds the scope of the living duration in the very process of forming its precondition, paradoxically shows life to be properly unrecordable, always in excess of what can be inscribed and made available for repetition. Accordingly, it contrasts markedly with Stiegler's understanding of the digital as a vehicle for the “critical analysis” of the image.⁶⁶ For what Viola's work exploits is precisely the capacity of the digital to dissolve the image in a far more radical sense than simply “decomposing” it. Viola's work perfectly exemplifies the radically new configuration of the image presented in this book: its reconfiguration, as the correlate of a process of embodied, affectively catalyzed framing. This is why Viola refers to the “content” of his experiments with temporal acceleration and deceleration as the “subjective image”—“an image that can only be experienced internally.”⁶⁷ In the end, Viola's work helps us see that the digital image in fact *is* the affection-image, since its materiality—its framing of this and not that information—is both continually in process and toured through affectivity as that extraperceptual “faculty” that ensures our openness to the preindividual, the preperceptual, the new, and with it, the very future-directedness of the constitutively incomplete present.

Conclusion

Given the importance of Viola's lesson regarding the “subjective image” and the exemplarity of his work for my claim regarding the digital image, I think it only fitting to conclude my ripple narrative of image, body, and affect by recapping how the embodied aesthetic of his work accomplishes the tasks I projected for myself in the introduction. In the first place, because he deploys media technology to create affection-images that cannot be identified with any technical images, Viola manages to move beyond the cinematic framework that, in my opinion, has severely limited appreciation of both the heterogeneity and the radicality of new media art. While it directly contests the thesis of Lev Manovich along the lines explored in chapter 1, we can now see that this accomplishment is particularly significant in relation to Deleuze's conception of the affection-image, and the entire sublimation of affection into the image that lies at the heart of his admittedly inspiring effort to expand in the most radical way the scope and philosophical vocation of cinema. Indeed, Viola's liberation of affectivity as the condition for the emergence of perception serves to mark the limitations of Deleuze's two cinematic regimes. On the one hand, it exposes a domain of Intensity that lies beneath Quality and Power—the two poles of Deleuze's conception of the affection-image. Accordingly, our analysis of Viola might be said to complete our earlier engagement with the digital facial image in chapter 4: it furnishes the very mechanism through which the incommensurability foregrounded in our confrontation with these images can be transformed into an intense and vitalizing affective experience. In this way, it traces a beyond of the movement-image that leads in a very different direction than does Deleuze's study. And, on the other hand, Viola's liberation of affectivity restores a continuity to the experience of time that is stripped from it by Deleuze's conceptualization of the time-image as an *interstice*. In exposing the

time-image's dependence on an act of spectatorial synthesis for its effectuation, Viola's work thus reveals embodied affectivity to be the condition of possibility for the apprehension of the time-image.

In this way, Viola's aesthetic experimentation with machine time shifts the purport of Deleuze's analysis in a fundamental manner: specifically, the time-image can no longer simply be the expression of the inhuman power of time, but rather, as something like the inscription of machinic time, can only be the catalyst for an affective experience through which the human being confronts her own dependence on the inhuman, or better, the preindividual.¹ Here, needless to say, it traces out a beyond of the time-image that leads beyond the confines of Deleuze's study, as he himself has anticipated with his call for a "cinema beyond cybernetics." For this same reason, it leads directly back to Bergson's fundamental, coimplicated conceptions of the body as a center of indeterminism and of the imbrication of perception with affection. Indeed, by expanding affectivity in a fundamentally embodied, yet profoundly empowering manner, Viola's work significantly expands Bergson's crucial insight into the bodily basis of intelligence, including, above all, technical intelligence, revealing it to be even more crucial at this later phase of our ongoing technogenesis.

At the same time, however, Viola's work retrospectively legitimizes the trajectory I have taken in this book, that of transformatively appropriating Deleuze's work on the cinema in order to redeem Bergson's fundamental insight into affective embodiment. Juxtaposed with Stiegler's allegedly Bergsonian affirmation of the identity of cinema and life, Viola's work teaches an altogether different lesson, one that is, I have been arguing, truer to the radical experimental vocation of Bergsonism. Specifically, his work helps us appreciate the crucial importance of Deleuze's study: the imperative to recognize the radical heteromorphism between human capacities and machinic functions. Thus, Viola's work helps us enlist Deleuze in the updating of Bergson that I have proposed in this study: against his own move to appropriate Bergson's ontology of images, Deleuze's analysis of cinema shows that the material universe cannot be materialized via the image, and accordingly, that the focus must shift to the post-cinematic problem of framing *information* in order to create (embodied, processural, and affectively constituted) *digital images*. And in a similar way, Viola's work helps us to redeem Deleuze from his own tendencies toward abstraction and programmatic antihumanism: by foregrounding the need to undo

the humanist isomorphism between media inscription (cinematographic grammatization) and time-consciousness, Viola's work urges us both to accept the new machinism that is instantiated in the phenomenon of "machine time" and to explore this machinism *as the very catalyst for an empowering technical transformation of the human*. In this way, it helps us to resituate Deleuze's work—and in a sense, to revivify it—in the context of contemporary media technology, where the notions like the "machinic" and "becoming-other" might be said to find their "natural" home as, in effect, updates of (broadly) Bergsonian conceptions of technical supplementation and duration as (hetero-)affectivity.